Message

From: Moritz, Vera [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FC42FD8127354991AD38B2ACB5C3651A-MORITZ, VERA]
Sent: 2/13/2017 7:16:23 PM
To: Spreng - CDPHE, Carl [carl.spreng@state.co.us]; Lindsay Masters - CDPHE [lindsay.masters@state.co.us]
Subject: RF: Follow up on risk emails for RF FYR report

Carl and Lindsay – FYI. This email from Susan required additional and more specific direction, as you'll see in the next email - Vera

From: Griffin, Susan
Sent: Monday, February 13, 2017 8:41 AM
To: Gallo, Patty (CONTR) <Patty.Gallo@lm.doe.gov>; Moritz, Vera <Moritz.Vera@epa.gov>
Cc: Cummins, Laura (CONTR) <Laura.Cummins@lm.doe.gov>; Kaiser, Linda (CONTR) <Linda.Kaiser@lm.doe.gov>; Ward, David (CONTR) <David.Ward@lm.doe.gov>; Surovchak, Scott <Scott.Surovchak@lm.doe.gov>; Smith, Patricia <Smith.Patricia@epa.gov>
Subject: RE: Follow up on risk emails for RF FYR report

Good morning,

I'd like to address the issue of Cr+6 and try to put this to rest. EPA's IRIS database has an oral Reference Dose, inhalation Reference Concentration and Inhalation Unit Risk for Cr+6. EPA evaluated Cr+6 for oral carcinogenicity and decided the evidence was lacking to develop an oral slope factor. These values on IRIS have not changed since 1998. There is an oral cancer slope factor from New Jersey listed on the Regional Screening Levels Tables (otherwise known as the bane of my existence). This is a highly controversial value because the scientific evidence strongly suggests that Cr+6 does not exhibit linearity at low doses, thereby negating the New Jersey value. Per EPA guidance, the Superfund program is expected to follow a hierarchy in selecting toxicity values for risk assessments (https://nepis.epa.gov/Exe/ZyNET.exe/91015CKS.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2000+Thru+2005&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C00thru05%5CTxt%5C00000030%5C91015CKS.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL). If toxicity values are available on IRIS, we use those toxicity values in our risk assessments. A 2nd or 3rd tier value (such as the New jersey value value) should only be used when there are NO available toxicity values from IRIS.

So back to the five year review. Since the CRA was done post-1998, there have been no changes to the toxicity values for Cr+6 that I am aware of. Second, chromium does not exist in soil as pure Cr+6. For conservatism, we always develop PRGs which assume a 1:6 or 1:7 ratio of CR+6:Cr+3. So please keep this in mind if you choose to develop a PRG for chromium in soil.

Sincerely,
Susan

From: Gallo, Patty (CONTR) [mailto:Patty.Gallo@lm.doe.gov]
Sent: Friday, February 10, 2017 12:11 PM
To: Moritz, Vera <Moritz.Vera@epa.gov>
Cc: Cummins, Laura (CONTR) <Laura.Cummins@lm.doe.gov>; Kaiser, Linda (CONTR) <Linda.Kaiser@lm.doe.gov>; Ward, David (CONTR) <David.Ward@lm.doe.gov>; Surovchak, Scott <Scott.Surovchak@lm.doe.gov>; Smith, Patricia <Smith.Patricia@epa.gov>; Griffin, Susan <Griffin.Susan@epa.gov>
Subject: Follow up on risk emails for RF FYR report

Vera,

As you know, Laura Cummins and Susan Griffin spoke yesterday about the scope of the chemical risk review for the RF FYR report. As Susan stated in her email to you, she suggested Laura focus the review on the risk drivers (i.e., the COCs identified in the 2006 CRA). These COCs are arsenic, benzo(a)pyrene, dioxin, vanadium, and plutonium. Because Laura has already completed a more comprehensive chemical risk review that included all chemical constituents for which PRGs were developed in the CRA, if we follow Susan's direction, we would simply reduce the narrative in Question B and only discuss the toxicity changes for these few COCs. As a result, any discussion of Cr+6 or other constituents whose toxicity factors changed over this FYR period would be deleted from the Question B discussion. We would retain the information on the more comprehensive evaluation in the internal project files. Because the working group has had discussions on Cr+6 changes, we just want to confirm that the evaluation you and Pat Smith are expecting addresses COCs only.

Because the radionuclide risk review is just beginning, however, we would like clarification on whether our radiological risk assessor should review all radionuclides discussed in the CRA (i.e., uranium isotopes, Pu-239/240, and Am-241) or just Pu-239/240 (the COC from the CRA).

Many thanks for your help.

Patty

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